

# **METHOD AND APPARATUS FOR MERGING RELATED IMAGE SEGMENTS**

## Abstract of the Disclosure

5           One embodiment of the invention relates to a method of merging segments to form  
supersegments in an image. The image consists of a plurality of segments that are constituent  
portions of the image. At least one candidate segment(s) and at least one neighboring  
segment(s) for each candidate segment are identified. An error statistic for each pair,  
consisting of a candidate segment and a corresponding neighboring segment, is computed. A  
10 neighboring segment is determined that results in a smallest error statistic for a given  
candidate segment. A determination is also made as to whether the smallest error statistic is  
sufficiently small to merit merging of the corresponding pair of segments. The corresponding  
pair of segments is merged to create one supersegment. The supersegment is a new segment  
including all pixels formerly contained in one of the two segments that were merged.

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